user determined new play speed for reading said tables and generating predetermined addresses within another one of said multiple versions for transducing in correspondence with said user determined new play speed.

REMARKS

Claim 16 is amended. Claims 12, 13, 14, are allowed.

Rejection of Claims 8 -10 and 16 - 17 under 35 U.S.C. §102(e)

Claims 8 - 10 and 16 - 17 stand rejected under 35 U.S.C. 102(e) as being anticipated by Abecassis.

In claim 8 applicants recite an apparatus for reproducing video programs which comprises a storage means storing a plurality of video program records. Each program record having a set of digitally encoded signal records representative of each program. A means for linking links the encoded signal records of each set to one another at predetermined jump points for selecting reproduction from different ones of the set. Each set of digitally encoded signal records has records of differing sizes for reproduction at a plurality of speeds.

The U.S. Patent to Abecassis discloses a system which allows a single version of a "video" to be viewed by different viewers each with differing levels of viewing restriction. Abecassis does not disclose or suggest applicants' recited set of program records and explains at column 15, lines 1 - 12 that his system jumps between addresses within the same single program record: Abecassis states,

> Referring now to FIG. 6 in conjunction with FIGS. 3C and 3D, in a preferred embodiment of reading non-sequential video segments from a single video source,

Abecassis continues at column 15, lines 9 - 12 stating,

> "...according to the program segment map and the segment scheduler, to preread within one revolution of the disc beginning frame information of a next non-sequential segment from the same video source...".

The system of Abecassis operates as a real time editing system where the single program or "video" is randomly accessed in accordance with predetermined

addresses of sections meeting the viewing restriction or preference. The desired programming is retrieved from these addresses within the single program and seamlessly presented to allow the same single program, "video" or film to be separately viewed with the desired rating code.

The Examiner states that the automated video retrieval device of Abecassis includes the following;

> "...a) means for storing a plurality of program records wherein each program record having a set of digitally encoded signal records representative of each program (see non-volatile resident memory 515, fixed or removable memory subsystem 503/504, a user's optical read/write access card or electronic memory card 505, or read/write video/data laser disc 501; col.14, lines 3-12) wherein viewer preferences are stored..."

This statement fails to accurately reflect the disclosure of Abecassis, specifically Abecassis fails to show, disclose or suggest applicants' recited;

> "...means for storing a plurality of program records wherein each program record having a set of digitally encoded signal records representative of said each program...".

Applicants store records of multiple programs and each program record has a set of digitally encoded records representative of that program, although Abecassis discloses various memory structures, Abecassis makes no mention nor suggestion of applicants' recited, "each program record having a set of digitally encoded signal records representative of said each program". Abecassis actually discloses the storage of program addresses that permit access to content according to the desired viewer preferences or applicable generic preferences all contained in a single program record.

The Examiner continues stating,

> "...b) means for linking the encoded signal records of each, said set to one another at predetermined jump points for selecting reproduction from different ones of said set (see program source 501; col.13, lines 60-62); from which program identifiers are read..."

However this statement inaccurate because Abecassis lacks applicants' set of digitally encoded records representative of said each program. At the Examiner's citation column 13, line 60 - 62 Abecassis discloses that,

> "...Upon a playing of a program, the control program causes the reading of the program's identifier from the program source 501, searches the mass memory fixed storage device 503 for a corresponding viewer preferences, or applicable generic preferences, and upon viewer confirmation applies the stored viewer preferences to the program segment map...".

Thus Abecassis discloses searching for viewer preferences or applicable generic preferences that are applicable to the program segment map. Although at the Examiner's citation Abecassis discloses searching for preferences applicable to the program segment, these are within a single program record. Lacking a set of program records, Abecassis thus fails to anticipate applicants' recited;

> "...means for linking said encoded signal records of each said set to one another at predetermined jump points for selecting reproduction from different ones of said set..."

Finally the Examiner asserts that,

> "...c) wherein each said set of digitally encoded signal records has records of differing sizes for reproducing at a plurality of speeds (see Fig.3A,3B,3C&3D; col.9, line 19 to col.10, line 46), here Abecassis shows how a conventional program with differently rated segments, and how the conventional program is edited (modified or changed) by editing out unwanted segments, in order to produce a variable content program that forms a version of the program that suits a particular set of user preference program..."

In the second and third paragraphs of page 5 of the Office Action the Examiner explains the operation of Abecassis and notes that a consequence of the different ratings causes differing amounts of program content to be removed, resulting in different program running times. Whilst this may be accurate regarding differing program running times, the Examiner's hypothesis fails with regard to the speed of reproduction. Specifically, removing scenes will produce a shorter program duration, however, the temporal rate or delivery of program content will remain the same, i.e. people will, for example, walk and talk at the recorded, normal or 1 times rate regardless of the degree of editing performed. The Examiner observes that a video delivery rate to an domestic display is required to be 30 Hz, thus applicants achieve different replay speeds by providing a set of digitally encoded records representative of the program where, for example, a 2:1 replay

speed is achieved by forming a record containing every other picture. Thus when reproduced, as the Examiner notes at 30 Hz, the scene or program content is portrayed with a two to one increase in speed. Similarly a five times forward speed requires a record created from every fifth picture which, when replayed at a 30Hz rate delivers the scene content speeded up by five times.

Thus when claim 8 is considered although Abecassis's editing system may result in a shorter program duration, there is no record. Furthermore changing the program duration does not alter to the speed of reproduction or program presentation. Because, Abecassis only ever has one program record, the differently rated versions never exist as a set of individual program records as applicants' disclose and recite. Abecassis does not disclose or suggest applicants' recited set of program records, hence Abecassis is incapable of anticipating that which applicants' recite, wherein,

> "...each said set of digitally encoded signal records has records of differing sizes for reproduction at a plurality of speeds...".

Abecassis teaches a system that provides different rated playbacks from a single program record by use of stored viewer or generic preferences. However, since Abecassis does not disclose or suggest applicants' recited set of program records representative of each program applicants' claim 8 is not anticipated nor rendered obvious by Abecassis. Withdrawal of the rejection under 35 U.S.C. §102(e) is respectfully requested.

Claims 9 and 10 depend from claim 8 and are, for the same reasons, not anticipated by Abecassis. Claim 9 is additionally patentable because applicants' recite that;

> "...predetermined jump points are grouped specific to transitions between similar temporal program events for reproduction at differing speeds...",

clearly applicants recited feature is essentially contrary to the basic premise of the Abecassis patent which facilitates playbacks with different viewer ratings. The Examiner asserts that, Abecassis discloses applicants' predetermined jump points are grouped specific to transitions between similar temporal program

events for reproduction at differing speeds. However, at the Examiner's citation, Abecassis makes no mention of jump points grouped specific to transitions between similar temporal program events to allow reproduction at different speeds.

Since dependent claims 9 and 10 relate to jumping between similar temporal program events in the set of program record, claims 9 and 10 are not anticipated nor rendered obvious by Abecassis and withdrawal of the rejection is respectfully requested.

In claim 16, as amended three times, applicants recite an apparatus for reproduction of compressed digital images at a plurality of speeds. The apparatus comprises a storage device having stored therein compressed program records. Each program record contains multiple versions where each version of allows reproduction at a different play speed. The storage device also has tables of predetermined temporally similar addresses within each version of the each program record for selecting between the different play speed records. A transducing means reproduces images from the compressed program records. A control means is responsive to user program selection for selecting one of the program records, and in accordance with a play speed selection selecting one of the multiple versions. The control means is additionally responsive to user determined new play speed for reading said tables and generating predetermined addresses within another one of the multiple versions for transducing in correspondence with the user determined new play speed.

Applicants' apparatus reproduces stored compressed program records. Each program record has multiple copies of the program where each copy allows reproduction at a different play speed. To allow the user to select between different play speeds while viewing the program, for example to go from play speed to forward at seven times speed or reverse at twenty one times speed, applicants provide tables of temporally similar addresses, (thus substantially similar program content) in the other replay speed program versions to allow selection there between (thereby avoiding discontinuity of the program content).

Abecassis discloses a system which allows a single version of a "video" to be viewed by different viewers each with differing levels of viewing restriction. The system functions as a real time editing system where the single program or "video" is randomly accessed in accordance with predetermined addresses of sections meeting the viewing restriction or preference.

As discussed for claim 8, Abecassis fails to show or disclose applicants' recited storage containing compressed program records. The Examiner admits that;

> "...Abecassis teaches a video device for the automated selective retrieval of non-sequentially-stored video segments of a video program, from a single video program source, responsive to a viewer's preestablished video content preferences, and the transmission of the selected segments as a seamless video program comprising...".

Thus Abecassis fails to show or disclose a storage device containing applicants' recited program records, wherein;

> "...each program record containing multiple versions where each version of said multiple versions allows reproduction at a different play speed...".

The examiner continues at length and states that,

> "...frames containing different content descriptors can be added or dropped, as the viewer chooses; wherein each version of the multiple versions allows reproduction at a different play speed (see col. 9, lines 35-50 and col. 24, line 55 to col. 25, line 19),

The statement that Abecassis "allows reproduction at a different play speed" is without support at the Examiners citation of Abecassis. As a consequence of editing the resultant real time execution (playback) of the (rating specific) segment map will cause the program duration to be different for different viewer ratings and different movie content. For example, an X rated playback of the movie Mary Poppins may have the same duration as G rated playback, similarly a G rated playback of the movie The Exorcist may be significantly shorter than an X rated version. Thus as discussed with regard to claim 8, although the program duration will vary with rating selection, the play back speed will remain constant at 1X. Abecassis provides no teaching or disclosure of storing multiple program versions to allow reproduction of program content at a different play speeds.

The Examiner continues further discussing the control means of Abecassis and the process of editing, however, Abecassis fails to show or disclose control functions and capabilities as applicants' recite, wherein,

> "...responsive to user program selection for selecting one of said program records, and in accordance with a play speed selection selecting one of said multiple versions, said control means being additionally responsive to user determined new play speed for reading said tables and generating predetermined addresses within another one of said multiple versions for transducing in correspondence with said user determined new play speed...".

The patent to Abecassis makes no mention of play back at differing speeds. Abecassis teaches a system which allows restricted viewing of a single program by different viewers, where the single program is randomly accessed during playback following a predetermined segment map locating material with the desired viewing restriction or rating code.

Since Abecassis lacks applicants' recited program records with multiple versions for reproduction at a different play speeds and temporally similar addresses within each version for selection between the different play speed records applicants' claim 16 is not anticipated nor rendered obvious. Withdrawal of the rejection under 35 U.S.C. §102(e) is respectfully requested.

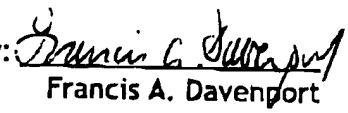
Claim 17 depends from claim 16 and is, for the same reasons, not anticipated nor rendered obvious by Abecassis. Claim 17 is additionally patentable because Abecassis lacks applicants' recited program records with multiple versions for reproduction at a different play speeds and tables of temporally similar addresses within each version. Thus lacking multiple program versions Abecassis has no requirement or ability to transduce images as applicants' recite, from a time which precedes the preceding version. Withdrawal of the rejection of claim 17 is respectfully requested.

Applicants have made every effort to place claims 8 -10, 16 and 17 in condition for allowance. Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) and the allowance of claims 8 - 10, 16 and 17.

Respectfully submitted

Gilles Boccon-Gibod et al.

October 23, 2002

By: 

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

16. (Third amended) An apparatus for reproduction of compressed digital images at a plurality of speeds, said apparatus comprising:

a storage device having stored therein compressed program records, each program record containing multiple versions where each version of said multiple versions allows reproduction at a different play speed, and tables of predetermined temporally similar addresses within each version of said each program record for selection between the different play speed records;

transducing means for reproducing images from said compressed program records; and,

control means responsive to user program [and play speed] selection for selecting one of said program records, and in accordance with a play speed selection selecting one of said multiple versions, said control means being additionally responsive to user determined new play speed for reading said tables and generating predetermined addresses within [said] another one [program record for transducing one] of said multiple versions for transducing in correspondence with said user determined new play speed.